

**SC5-SQ01**
**Jumbo flying squid datasets held by the Secretariat**  
*Secretariat*


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### Summary

This paper identifies and describes Jumbo flying squid data sets held by the SPRFMO Secretariat. The Jumbo flying squid fishery is a large fishery that covers an extensive area of the Eastern Pacific Ocean. During 2015 there were 246 Chinese vessels, 9 Chinese Taipei vessels, 2 Korean vessels and 6 reefers operating in the SPRFMO Area as well as numerous vessels (mainly artisanal) operating in the nearby EEZs and Territorial waters.

### Annual Catch data

The annual catch data series for Jumbo flying squid held by the Secretariat begins in 1978 and updated figures are indicated by an underline (refer Table 2). In line with the Commissions 2016 agreement to commence a data recovery initiative for historical squid fishing, Peru has made additional annual catch data available for the period 2009 -2014.

The Secretariat has also looked at the catch records for other squid species. Those records are dominated by EEZ captures with SPRFMO Area catches totalling 428 (t) from 6 events.

### Fishing activity data

The Secretariat holds fishing effort data at varying resolutions as shown below in Table 1.

Recently, as per the Commissions 2016 agreement, more participants have begun to submit data that is consistent with the specifications of CMM 02-2017, Annex 4 (represented in the table below as “0.1\*0.1 degree Jig – Daily”). This data generally contains information on vessels, fishing date, start and end position, crew numbers, and number of jigging machines, lighting power, hours fished and catch weights. However, catch data aggregated to coarser resolutions only occasionally contains summarised measures of effort such as vessel days, fishing hours or number of vessels.

Participant	Datatype	Available years
China	5*5 degree (Jig - Annual)	2002-2006
	1*1 degree (Jig - Monthly)	2008, 2015
	0.1*0.1 degree (Jig - Daily)	2016
Japan	0.1*0.1 degree (Jig - by Trip)	2010
Korea	0.1*0.1 degree (Jig - Daily)	2012-2016
Peru	0.1*0.1 degree (Trawl -Tow by Tow)	2014
Chinese Taipei	5*5 degree (Jig - Annual)	2007-2015
	0.1*0.1 degree (Jig - Daily)	2016

**Table 1:** Resolution of the various types of fishing activity data held by the Secretariat (SPRFMO Area).

Year	Chile		China	Ecuador	Japan			Korea		Chinese Taipei		Peru		Ukraine	Total
	EEZ-CHL	FAO87	HS-FAO87	HS-FAO87	FAO87	EEZ-Other	FAO87	HS-FAO87	EEZ-PER	HS-FAO87	FAO87	HS-FAO87	EEZ-PER	HS-FAO87	FAO87
1978							7								7
1983					???		1								1
1984							9								9
1985							15 503								15 503
1986							94								94
1988						0		43							43
1989						0		14							14
1990						0		1 605					7 441	142	9 188
1991		445				2 173		50 432					81 655	398	84 721
1992		9 400			???	49 313		1 874			1 698		106 547	1	168 833
1993		7 442			???	52 221		3 579			0		140 355		203 597
1994		205				81 507		2 698			0		209 970		294 380
1995					???	36 478		37			0		109 155		145 670
1996		2				557		644			0		8 138		9 341
1997						12 924		297			0		16 061		29 282
1998		5				0	0	0			0		547		552
1999		6				6		40			0		54 652		54 704
2000		9				32 174		1 704			0		53 795		87 682
2001		3 476		17 770		71 069		1 132	5 797	0	0		71 834		171 078
2002		5 589		50 483		26 268		33 978	13 130	8 629		12 064	146 390		296 531
2003		15 191		81 000		22 549		4 510	1 681	3 041		23 009	153 727		304 708
2004		175 134		205 600		22 385		4 615	2 026	8 761		39 450	270 368		728 339
2005		296 953		86 000				1 633	2 519	0		15 976	291 140		694 221
2006		219 800		62 000				323	2 048	437		18 349	434 261		737 218
2007	124 389			46 400					0	0	14 750		427 591		613 130
2008	145 171			79 064					5 971	804	31 161		533 414		795 585
2009	56 337			70 000					7 221	0	12 319		<u>411 805</u>		<u>557 682</u>
2010	200 428			142 000			498		7 764	6 742	29 206		<u>369 822</u>		<u>756 450</u>
2011	163 450		45	250 000						7 410		35 418	<u>404 730</u>		<u>861 053</u>
2012	144 956		9	261 000						8 310		14 177	<u>497 462</u>		<u>925 914</u>
2013	105 905		22	264 000		???				6 034		7 759	<u>451 061</u>		<u>834 780</u>
2014	176 569		0	332 523		???				7 203		4 795	<u>556 156</u>	1 190	<u>1 078 435</u>
2015	<u>143 716</u>		0	323 636		1 500				4 263		10 072	<u>513 796</u>		<u>996 982</u>
2016 (estimate)				223 300						4 388		12 989			290 177

**Table 1:** Annual Catch weights (t) for Jumbo flying squid (GIS) as submitted to the SPRFMO Secretariat. 2016 figures are estimates (if available).  
 ??? - Ecuador provided some information in paper [SC-03-35](#) during 2015, but complete annual figures have not yet been supplied.